

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (previously presented) An anonymity setting device comprising:

a specificity calculating unit extracting an expression specifying a person from an input document and calculating a specificity to evaluate a degree of intensity at which the expression can specify the person; and

an anonymity setting processing unit changing a name of the person in the input document having a specificity which is greater than a predetermined threshold;

wherein said specificity calculating unit extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of specificity for evaluating a degree of specificity at which the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing unit sets, when there is a surrounding expression of a degree of specificity higher than a predetermined threshold, anonymity for such surrounding expression and the person's name.

2. (previously presented) The device according to claim 1, further

wherein said specificity calculating unit extracts the surrounding expressions of the person's name from said input document, and calculates, for each combination of individual extracted surrounding expressions, the degree of specificity for evaluating the degree of intensity at which the person can be specified with a combination of the extracted individual surrounding expressions; and

said anonymity setting processing unit sets, when there is a combination of surrounding expressions of the degree of specificity higher than a predetermined threshold, anonymity for the combination of surrounding expressions.

3. (canceled)

4. (previously presented) The device according to claim 1, wherein the specificity calculating unit includes:

- a sentence extracting means extracting a sentence from an input document;
- a part-of-speech analyzing means decomposing the extracted sentence for each part of speech;
- a name extracting means extracting the person's name based on a person name extracting rule from a result of the part-of-speech analysis; and
- a name specificity calculating means calculating a specificity of the name thus extracted based on statistical information.

5. (currently amended) An anonymity setting~~The device comprising:~~
a specificity calculating unit extracting an expression specifying a person from an input document and calculating a specificity to evaluate a degree of intensity at which the expression can specify the person; and

an anonymity setting processing unit changing a name of the person in the input document having a specificity which is greater than a predetermined threshold;

wherein said specificity calculating unit extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of specificity for evaluating a degree of specificity at which the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing unit sets, when there is a surrounding expression of a degree of specificity higher than a predetermined threshold, anonymity for such surrounding expression and the person's name; and~~according to claim 1,~~

wherein the specificity calculating unit further includes:

- a syntax analyzing means creating a syntax tree indicative of a modification relationship between clauses based on a syntax analyzing rule from a result of a part-of-speech analysis;
- a person specifying tree extracting means extracting a tree structure specifying the person as a person modification expression based on a person specifying tree extracting rule for the tree structure obtained by the parsing unit; and
- a tree structure specificity calculating means calculating a specificity of the person specifying tree thus extracted based on statistical information.

6. (previously presented) The device according to claim 4, wherein the specificity calculating unit includes a reference specificity database registering specificity data having a set

of an expression specifying the person, a type of the person's name or a modification expression and a specificity which are created based on an existing document.

7. (previously presented) The device according to claim 4, wherein the specificity calculating unit includes a database creating means extracting the person's name and a modification expression for each document from an existing document of a document database to calculate a specificity and for creating a reference specificity database registering specificity data having a set of an expression specifying the person, a type of the person's name or a modification expression and a specificity.

8. (previously presented) The device according to claim 1, wherein the anonymity setting processing unit has a non-anonymity requiring database registering a non-anonymity requiring expression and a expression registered in the non-anonymity requiring database in an expression specifying the person extracted from an input document is not rewritten to an anonymity expression.

9. (previously presented) The device according to claim 1, wherein the anonymity setting processing unit has an anonymity requiring database registering an expression to be rewritten to an anonymity expression and all expressions in the input document registered in the anonymity requiring database are rewritten to the anonymity expression.

10. (previously presented) The device according to claim 1, wherein the anonymity setting processing unit rewrites an expression specifying the person extracted from the input document to have no meaning.

11. (currently amended) An anonymity settingThe device comprising:
a specificity calculating unit extracting an expression specifying a person from an input document and calculating a specificity to evaluate a degree of intensity at which the expression can specify the person; and
an anonymity setting processing unit changing a name of the person in the input document having a specificity which is greater than a predetermined threshold;
wherein said specificity calculating unit extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of

specificity for evaluating a degree of specificity at which the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing unit sets, when there is a surrounding expression of a degree of specificity higher than a predetermined threshold, anonymity for such surrounding expression and the person's name; and~~according to claim 1,~~

wherein the anonymity setting processing unit replaces an expression specifying the person extracted from the input document to a low specificity expression having a specificity which is equal to or smaller than a threshold to be used for rewriting with the anonymity expression.

12. (previously presented) The device according to claim 1, wherein the anonymity setting processing unit encrypts an expression specifying the person extracted from the input document to carry out rewriting with the anonymity expression.

13. (currently amended) The device according to claim 15, further comprising a decrypting indicating means decrypting and displaying an encrypted expression when someone reads a rewritten document with an anonymity expression through encrypting by the anonymity setting processing unit.

14. (previously presented) A document anonymity setting method comprising:
a specificity calculating step of extracting an expression specifying a person from an input document and calculating a specificity to evaluate a degree of specificity at which the expression specifies a name of the person; and

an anonymity setting processing step of rewriting the name of the person with an anonymity expression in said input document which has a specificity higher than a predetermined threshold;

wherein said specificity calculating step extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of specificity for evaluating a degree of intensity at which the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing step sets, when there is a surrounding expressions of a degree of specificity higher than a predetermined threshold, anonymity for said surrounding expression and the person's name.

15. (previously presented) The method according to claim 14, wherein the specificity calculating step extracts the person's name from the input document and calculates a specificity to evaluate the degree of intensity at which the person's name thus extracted can specify the person, and

the anonymity setting processing step anonymity sets the person's name having a greater specificity than the predetermined threshold.

16. (previously presented) The method according to claim 15, wherein said specificity calculating step extracts surrounding expressions of the person's name from said input document, and calculates, for each combination of individual surrounding expressions, the degree of specificity for evaluating the degree of intensity at which the person can be specified with a combination of the extracted individual surrounding expressions: and

said anonymity setting processing step sets, when there is a combination of surrounding expressions of a degree of specificity higher than the predetermined threshold, an anonymity for the combination of surrounding expressions.

17. (previously presented) The method according to claim 14, wherein the specificity calculating step includes:

a sentence extracting step of extracting a sentence from the input document;

a part-of-speech analyzing step of discriminating the extracted sentence for each part of speech;

a person's name extracting step of extracting the person's name based on a name extracting rule from a result of the part-of-speech analysis; and

a person's name specificity calculating step of calculating a specificity of the person's name thus extracted based on statistical information.

18. (currently amended) A document anonymity settingThe method comprising:
a specificity calculating step of extracting an expression specifying a person from an input document and calculating a specificity to evaluate a degree of specificity at which the expression specifies a name of the person; and

an anonymity setting processing step of rewriting the name of the person with an anonymity expression in said input document which has a specificity higher than a predetermined threshold;

wherein said specificity calculating step extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of specificity for evaluating a degree of intensity at which the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing step sets, when there is a surrounding expressions of a degree of specificity higher then a predetermined threshold, anonymity for said surrounding expression and the person's name; and~~according to claim 14,~~

wherein the specificity calculating step further includes:

a syntax analyzing step of creating a syntax tree indicative of a modification relationship between clauses based on a syntax analyzing rule from the result of the part-of-speech analysis;

a tree structure specifying a person extracting step of extracting a tree structure specifying the person as a person modification expression based on a person specifying tree extracting rule for the syntax tree obtained at the syntax analyzing step; and

a tree structure specificity calculating step of calculating a specificity of the tree structure specifying the person thus extracted based on statistical information.

19. (currently amended) A document anonymity setting The method comprising:
a specificity calculating step of extracting an expression specifying a person from an input document and calculating a specificity to evaluate a degree of specificity at which the expression specifies a name of the person; and

an anonymity setting processing step of rewriting the name of the person with an anonymity expression in said input document which has a specificity higher than a predetermined threshold;

wherein said specificity calculating step extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of specificity for evaluating a degree of intensity at which the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing step sets, when there is a surrounding expressions of a degree of specificity higher then a predetermined threshold, anonymity for said surrounding expression and the person's name; and

wherein the specificity calculating step includes:

a sentence extracting step of extracting a sentence from the input document;

a part-of-speech analyzing step of discriminating the extracted sentence for each part of speech;

a person's name extracting step of extracting the person's name based on a name extracting rule from a result of the part-of-speech analysis; and

a person's name specificity calculating step of calculating a specificity of the person's name thus extracted based on statistical information; and~~according to claim 17,~~

wherein the specificity calculating step takes a weight average of a specificity obtained by a calculation of an expression which specifies the person extracted from the input document with a specificity registered in a reference specificity database registering specificity data having a set of an expression specifying the person created based on an existing document, a type of the person's name or a modification expression and a specificity, and normalizes the weight average.

20. (currently amended) The method according to claim 17, wherein the specificity calculating step includes a database creating step of extracting the person's name and a modification expression for each document from an existing document of a document database to calculate a specificity and creating the reference specificity database registering specificity data having a set of an expression specifying the person, a type of the person's name or a modification expression and a specificity.

21. (currently amended) ~~A document anonymity setting~~The method comprising:
a specificity calculating step of extracting an expression specifying a person from an input document and calculating a specificity to evaluate a degree of specificity at which the expression specifies a name of the person; and

an anonymity setting processing step of rewriting the name of the person with an anonymity expression in said input document which has a specificity higher than a predetermined threshold;

wherein said specificity calculating step extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of specificity for evaluating a degree of intensity at which the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing step sets, when there is a surrounding expressions of a degree of specificity higher than a predetermined threshold, anonymity for said surrounding expression and the person's name; and~~according to claim 14,~~

further comprising an anonymity setting indicating step of setting and changing a threshold to be used at the anonymity setting processing step.

22. (currently amended) A document anonymity setting~~The method comprising:~~
a specificity calculating step of extracting an expression specifying a person from an
input document and calculating a specificity to evaluate a degree of specificity at which the
expression specifies a name of the person; and
an anonymity setting processing step of rewriting the name of the person with an
anonymity expression in said input document which has a specificity higher than a
predetermined threshold;
wherein said specificity calculating step extracts surrounding expressions of the person's
name from said input document, and calculates, for each surrounding expression, a degree of
specificity for evaluating a degree of intensity at which the person can be specified with the
extracted individual surrounding expressions; and
said anonymity setting processing step sets, when there is a surrounding expressions of
a degree of specificity higher then a predetermined threshold, anonymity for said surrounding
expression and the person's name; and~~according to claim 14,~~
wherein the anonymity setting method retains, in a threshold database, a threshold used
in an anonymity setting processing for each processing document and sets a last threshold as a
default during the anonymity setting processing of a new input document.

23. (previously presented) The method according to claim 14, wherein the anonymity
setting processing step does not replace a registered expression with reference to a non-
anonymity setting requiring database in the anonymity setting expression extracted from the
input document.

24. (previously presented) The method according to claim 14, wherein in the
anonymity setting processing step all expressions are rewritten with anonymity expressions in
the input document if the input document is registered in an anonymity setting database
registering an expression to be always subjected to being rewritten with an anonymity
expression.

25. (previously presented) The method according to claim 14, wherein the anonymity
setting processing step replaces the expression which specifies the person extracted from the
input document with a meaningless expression.

26. (currently amended) A document anonymity setting~~The method comprising:~~
a specificity calculating step of extracting an expression specifying a person from an
input document and calculating a specificity to evaluate a degree of specificity at which the
expression specifies a name of the person; and

an anonymity setting processing step of rewriting the name of the person with an
anonymity expression in said input document which has a specificity higher than a
predetermined threshold;

wherein said specificity calculating step extracts surrounding expressions of the person's
name from said input document, and calculates, for each surrounding expression, a degree of
specificity for evaluating a degree of intensity at which the person can be specified with the
extracted individual surrounding expressions; and

said anonymity setting processing step sets, when there is a surrounding expressions of
a degree of specificity higher then a predetermined threshold, anonymity for said surrounding
expression and the person's name; and~~according to claim 14,~~

wherein the anonymity setting processing step replaces the expression specifying the
person extracted from an input document with a low specificity expression having a specificity
equal to or lower than a threshold which is to be used for rewriting of the expressions specifying
a person.

27. (previously presented) The method according to claim 14, wherein the anonymity
setting processing step encodes the expression specifying the person extracted from the input
document, thereby carrying out the anonymity setting.

28. (previously presented) The method according to claim 27, further comprising a
decrypting indicating step of decoding and displaying an encrypted expression specifying the
person when reading an anonymity setting document which is subjected to the anonymity setting
through the encoding at the anonymity setting processing step.

29. (previously presented) A computer readable recording medium recording an
anonymity setting program comprising:

a specificity calculating step of extracting a person from an input document and
calculating a specificity to evaluate a degree of intensity at which a name of the person thus
extracted can specify the person's name; and

an anonymity setting processing step of rewriting the person's name with an anonymity expression in said input document which has a higher specificity than a predetermined threshold;

wherein said specificity calculating step extracts surrounding expressions of the person's name from said input document, and calculates, for each surrounding expression, a degree of specificity for evaluating at what degree of intensity the person can be specified with the extracted individual surrounding expressions; and

said anonymity setting processing step sets, when there is a surrounding expression of a degree of specificity higher than a predetermined threshold, anonymity for such surrounding expression and person's name.

30. (previously presented) A recording medium according to claim 29, further

wherein said specificity calculating step extracts surrounding expressions of the person's name from said input document, and calculates for each combination of individual surrounding expressions, the degree of specificity for evaluating the degree of intensity at which the person can be specified with a combination of the extracted individual surrounding expressions; and

said anonymity setting processing step sets, when there is a combination of surrounding expressions of a degree of specificity higher than a predetermined threshold, an anonymity for the combination of surrounding expressions.

31. (previously presented) A method for redacting identities in documents, comprising:

extracting an expression specifying a person from an input document;

calculating a degree to which the expression specifies the person; and

rewriting the expression with an anonymous expression if the degree of specificity is greater than a predetermined threshold.

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